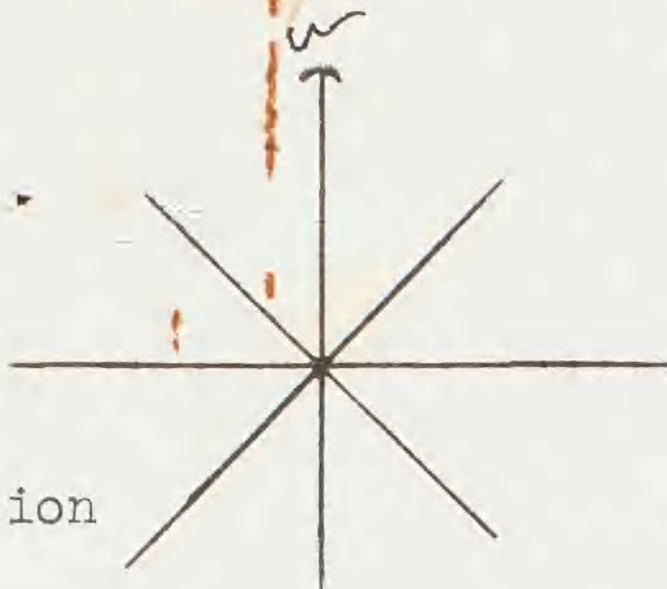


Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 16 Nov 67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0720	GULL SP				BEGIN OBS.
0721	HERRING GULL	3	cel		imm 1 lge 2 small.
	BFA	1			
0723	BON. GULL	2	cel		
0724	PHAL. SP.	2	cel		
0726	PHAL. SP.	3	cel		
0728	SOOTY SH.	1	cel		
0731	PHAL. SP.	2	S		
0734	" "	2	cel		SLICKS
37	" "	2	S		SLICKS E SEAWARD
38	" "	1	S		
50	" "	1	cel		
54	BLACK TURNST.	1	cel		CALLING.
0807	PHAL. LOON SP	2	cel		
08	LWRSP	1	cel		
10	PHAL. SP.	2	cel		SLICK
16	SMALL GULL	1	cel		ON H ₂ O BON.?
17	SHARP PET	1	SE		SS/FULM
18	RED PHAL	1	S		
30	WRSP	1	cel		
34	JAE GSP	2	cel		POM? LT PN.
38	SOOTY SH	2	S		
47	" "	1	S		
50	LWRSP	1	cel		
53	SHARP/PET	1	S		SS/FULM.
56	SOOTY SH	2	S		
0900	LGE. ALCID	1	cel		
08	SOOTY SH	1	S		
09	WRSP	1	cel		
13	SOOTY SH	1	cel		
22	" "	2	S		
28	HER. GULL	1	cel		ad m/2 imm
33	SOOTY SH	1	S		
34	LWRSP	1	cel		
35	" "	1	cel		
55	LWRSP	1	cel		
55	Sooty Sh. ad	1	SW		
59	" "	2	cel		
1003	" "	2	SE		
05	ST. PET	1	cel		

BG. - 2

PARCEP - 15

SS - 1

BT - 1

LOON - 2

STORM - 2

RPHAL - 2

S/P - 1

27 ✓

JSP. - 2

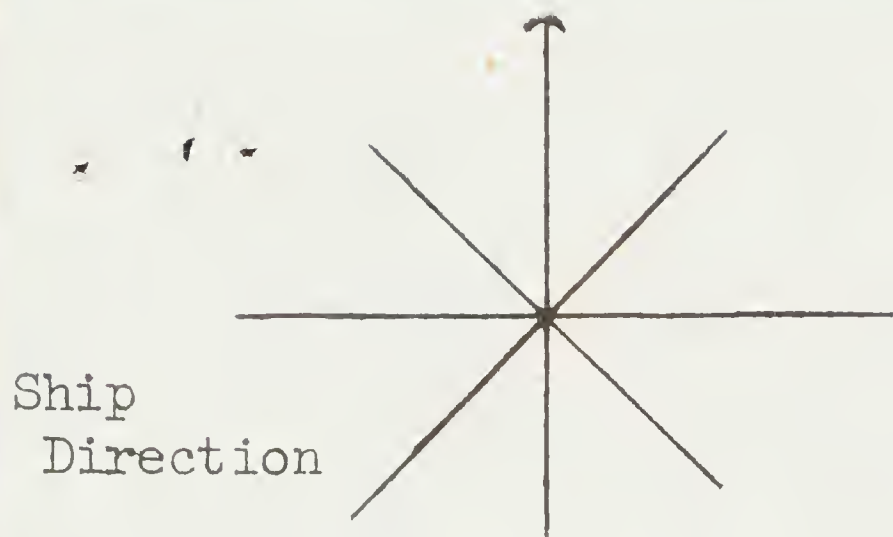
SS - 15

STORM - 6

S/P - 1

LGEALCID - 1

25 ✓



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 16 Nov 67
Pg. # 2

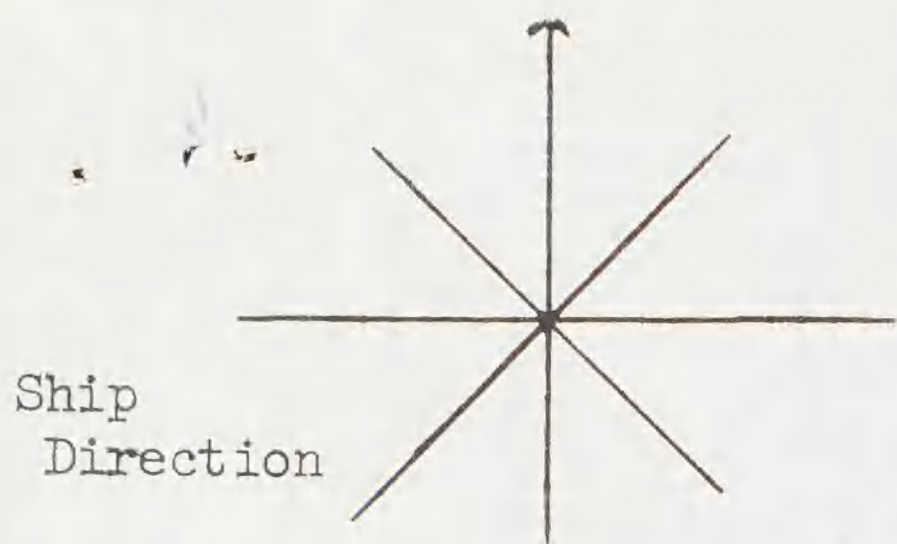
SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

M TF	1015	H. Gull	(4)	ce	Following 3 Im 1 Ad
	22	R. Phal	3	ce	on H ₂ O
	24	Fulmar	1	ce	on H ₂ O
	24	Sooty Shear	1	ce	on H ₂ O
	29	st. Pet	2	ce	
	45	Sooty Shear	1	ce	
	50			ce	porpoise 100+ - Right whale dolphin
	57	Sooty Shear	3	S	
	59	"	5	S	
	1105	Pintail	32	S	
M	07	BFA	(2)	S	
	12	LWRSP	1	ce	
	13	"	1	S	
	13	Sooty Shear	1	S	Landed in H ₂ O then got up and went on S.
	17	"	1	S	
	18	LWRSP	1	SE	
	52	"	1	ce	
	58				150+ PORPOISE LISSODELPHIS REL. 2
	1202	LWRSP	1	ce	
	06	LOON SP	4	E	LOONS ?
M	07				WHALE 1 (SMALL SPERM ?)
	08	SOOTY SH	1	ce	
	10	"	1	ce	
	16				1 SPERM
	17				2 SPERM
	18	STORM PET	12+2	ce	a milling flock
	20	LWRSP	1	ce	
	33	"	1	ce	
	41	Loon	1	ce	Following ship
	45	BFA	(3)	ce	Darting
M	48	Juvs SP	1	N	From Pen or Parasitic
	53	H GULL	(5)	ce	1 ad & 1st winter ad landed on deck
	54	Phal SP	1	ce	
	54	st. Pet	1	ce	
	53	H. Gull	(5)	ce	
	54	Sooty Shear	1	S	5 1st winter
	58	"	1	S	
	1405	"	3	S	
	06	st. Pet	2	ce	
	11	st. Pet	1	S	
M	11	Sooty Shear	1	S	
	14	LWRSP	1	ce	
	15	Loons	2	SE	
	18	Sooty Shear	2	SE	

R PHAL - 3 -
FULM - 1 -
SS - 22 -
WSP - 26 -
PINT - 32 -
LOON - 7 -
JSP - 1 -
PHAL - 1 -

93 V



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 16 Nov. 67
Pg.# 3

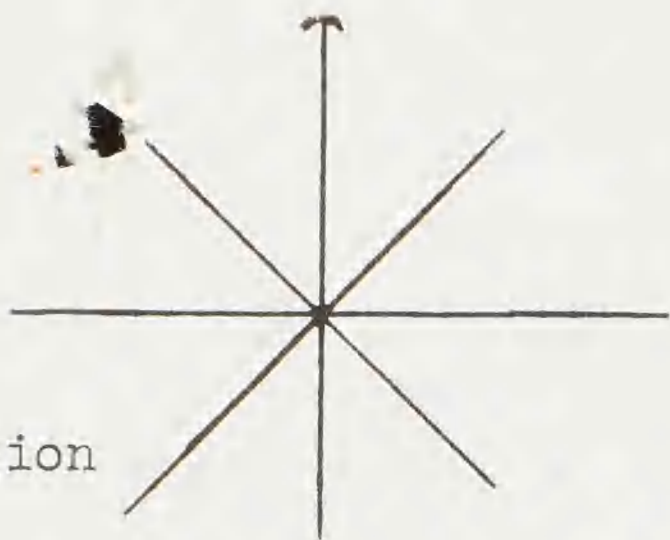
SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1420	Phalarope	3	ce		
23	Loon SP	1	SE		
27	Sooty Shear	1	S		
30	St. Pet	3	ce		
35					sperm whale 1 fluke
40	St. Pet	2	ce		
46	Loon	1	ce		landed behind ship - then done.
49	Sooty Shear	1	S		
50	St. Pet	2	ce		
510	Sooty Shear	2	S		
14	Jaeger SP	1	NE		Imm or Parus Pom or Parus, tie
15	Sooty Shear	1	S		
25	St. Pet	2	ce		
25	Sooty Shear	3	ce		
35					DECPHINUS 25+
35	SOOTY SH.	3	ce		milking alone porpoise
40	Jaeger SP	1	ce		Parus Pom?
43	Sooty Sh	1	S		
44	St. Pet	1	ce		
54					20 PORPOISE
56	LOON SP	4	SE		
57	SOOTY SH	2	S		
1600	" "	1	ce		
03	" "	1	ce		
04	STORM PET	1	ce		
07	SHEAR/PET	1	ce		S S / FUL.
14	SOOTY SH	2	S		
15	LOON	1	SE		
20	SOOTY SH	1	S		
25	" "	1	S		
27	" "	2	S		
28	STORM PET	2	S		
32	" "	1	S		
33	SOOTY SH	1	S		
40	LOON	1	SE		
43	S/Sf	1	SE		
44	STORM PET	1	ce		
47					porpoise 20!
47	BIRD	3	ce		alone response SS?
52	S/Sf	1	ce		
53	STORM PET	1	S		
57	SOOTY SH.	2	S		
705	STORM PET	2	ce		
10	S/Sf	1	S		looked small
12	STORM PET	1	S		
13					CLOSE OBS. SS

PHALSP - 3 -
LOON - 8 -
SS - 25 -
WASP - 19 -
JSP - 2 -
S/P - 1 -
S/SH - 3
BIRD - 3
64 ✓

182

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 17 Nov 67
Pg. # 1

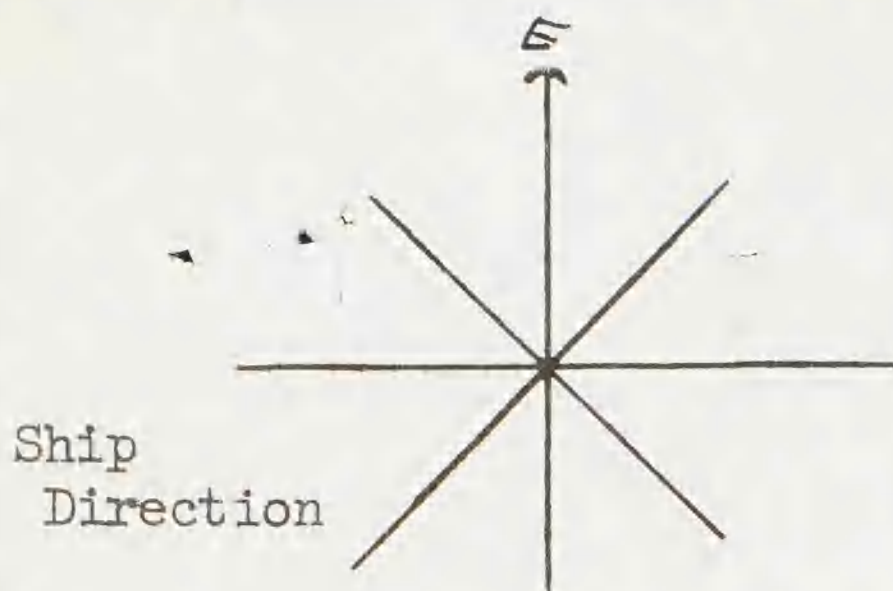
SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0658					Sunrise begin observation
0712	BFA	①	ce		Fallbank DM
17	"	2	a		"
25	Sooty Shear	1	5		Touching
43	" "	2	5		Touching
0801	LWRSP	1	ce		
03	Sooty Shear	1	5		Touching
10	" "	1	5		
15	" "	1	5		
18	" "	2	5		
25	" "	1	5		
27	" "	1	5		
32	" "	1	5		
36	" "	1	5		
37	" "	1	5		
53	" "	2	5		
53	H. Gull	①	ce		Ad
0909	Sooty Shear	1	5		
35	" "	1	5		
36	" "	1	5		
47	" "	1	5		
49	" "	1	5		
53	" "	1	5		
54	LWRSP	4	ce		
1005	Sooty Shear	1	5		
07	" "	1	5		
18	LWRSP	1	ce		
20	Sooty Shear	1	5		
36	LWRSP	1	ce		
50	" "	1	ce		
55	Sooty Shear	1	5		
56	" "	2	5		
1103	LWRSP	5	5		
05	" "	2	5		
06	" "	2	a		on H ₂ O
10	Sooty Shear	1	5		
13	" "	1	ce		
16	" "	1	5		
20	STORM PET.	3	ce		LWRSP
30	SOOTY SH	1	5		
31	LWRSP	1	ce		
42	Sooty Sh	1	5		
53	LWRSP	1	ce		
55	" "	2	ce		
1207	" "	2	ce		
08	SOOTY SH	1	5		
20	STORM PET	1	ce		

SS-33
STORM-29
02 ✓





SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

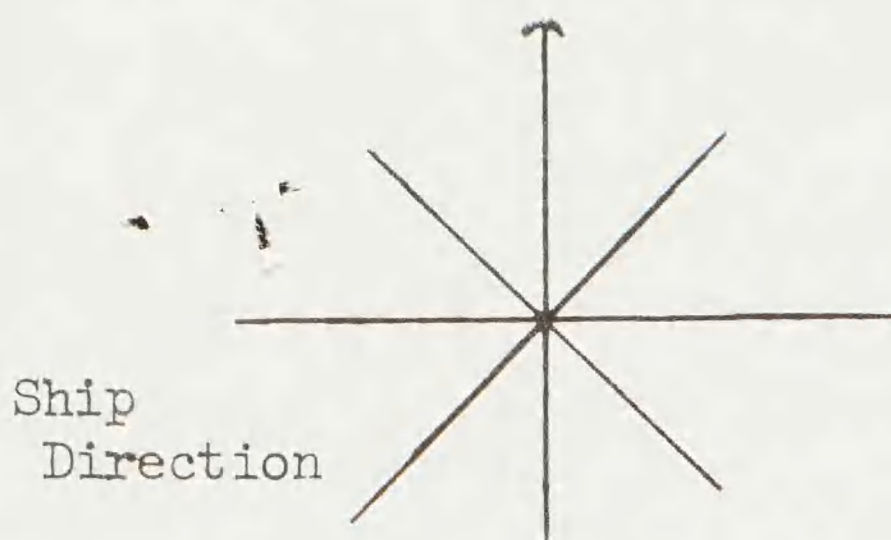
Date 17 Nov.
Pg.# 2

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1228	LWRSP	1	ce		WINDS SE ESE 10 KTS
30	"	1	ce		RAIN CHOPPY
40	STORM PET	2	S		
43	COONS? PET	1	ce		REL. 2
44	S/SB	1	SE		
45	STORM PET	1	ce		ce with coops?
47	SOOTY SH	2	S		
34	STORM PET	1	S		
55	LWRSP	1	ce		landed on H ₂ O
57	SOOTY SH	2	S		
58	STORM PET	1	S		
1303	SOOTY SH	1	S		
04	POM TAREG	1	ce		
05	SOOTY SH	1	S		
07	" "	1	S		
08	BFA	③	ce		both dunk all 3
18	LWRSP	1	ce		
27	SOOTY SA	1	S		
34	" "	2	S		
45	" "	1	S		RAIN EASES
37	LWRSP	1	ce		WINDS INCREASES
58	SOOTY SH	3	S		
1408	" "	4	S		
10	" "	1	S		
21	" "	1	S		arcing light
32	" "	4	ce		ce
	STORM PET	2	ce		
33	LWRSP	1	ce		
42	SHUN	1	S		
45	SOOTY SH	1	S		
47	" "	2	S		
49	" "	1	S		
50	STORM PET	2	ce		
50	LWRSP	1	ce		
58	SOOTY SH	1	S		
1506	" "	1	S		
07	" "	1	S		
08	" "	1	S		
11	" "	1	S		
14	" "	2	S		
25	" "	4	S		
28	" "	1	S		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 12 Nov.
Pg. # 3

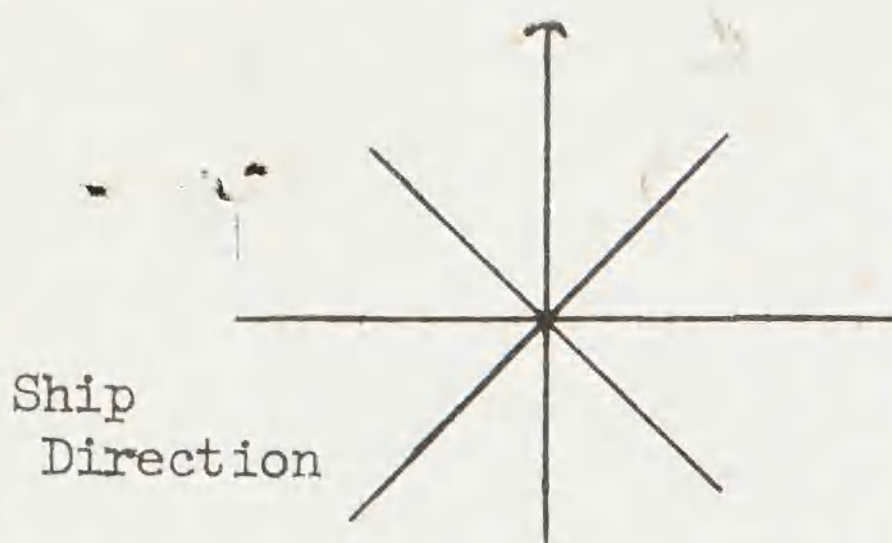
SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1529	LWRSP	1	ce		
1532	SOOTY SH	1	S		
36	" "	2	S		
37	LWRSP	1	S		
38	SOOTY SH	1	S		
43	" "	2	S		
45	" "	1	S		
50	" "	1	S		
1603	" "	2	S		
04	STORM PET	1	ce		
12	SOOTY SH	2	S		
17	" "	1	S		
19	STORM PET	1	S		
20	SOOTY SH	1	S		
25	LWRSP	4 4	S		
28	SOOTY SH	1	S		
33	LWRSP	1	S		
35	SOOTY SH	1	S		
38	LWRSP	2	S		
40	"	2	S		
52	"	1	ce		
FF M 1700	SOOTY SH	5	}	MILLING TIGHTLY ABOVE OBJECT IN A SLICK PROBABLY MILLER REFUSE	
	LWRSP	10			
				KILLER WHALE - 2	

STORM - 38
COOK - 1
SB - 61
PJ - 1
STORM - 1

102 ✓



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

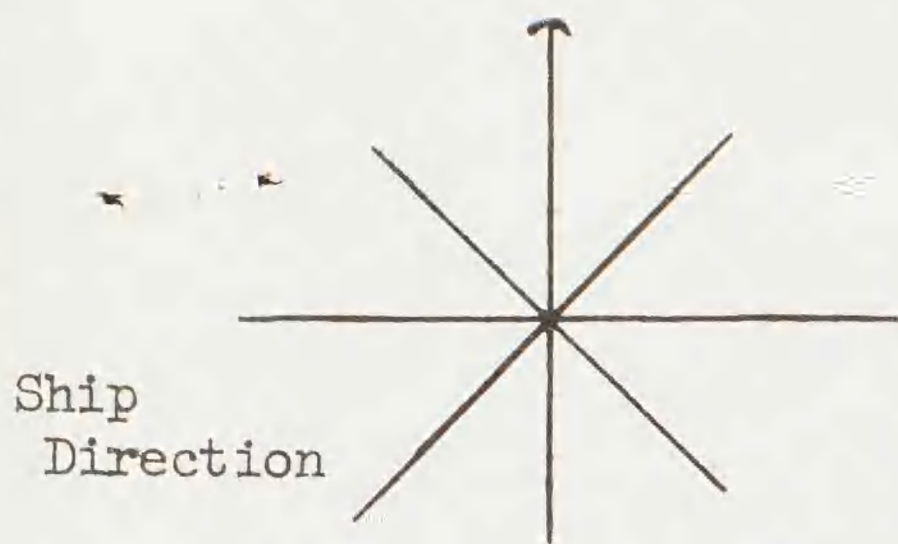
OBSERVERS:

Date 18 Nov 67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0642					SUNRISE BEGIN OBS.
55					
0700	BFA	(2)	ce		Begin obs
08	Sooty Shear	2	S		Following
21	H. Gull	(1)	ce		Following Imm
30	Sooty Shear	2	SW		
55	" "	2	S		
57	H. Gull	(3)	ce		1st winter
0810	Sooty Shear	1	S		
11	Jaeger SP	2	S		
19	WISP	1	ce		
22	Sooty Shear	1	S		
29	Jaeger SP	1	S		
35	Pom Jaeger	1	S		Imm.
36	H Gull	(3)	ce		1st winter
	W Gull	(2)	ce		Ad
	Gull?	(1)	ce		Imm
0906	Jaeger SP	2	S		
14	Sooty Shear	1	S		
15	Phalarope	8	ce		
49	Pom Jaeger	1	ce		Imm
1010	Red Phal	2	ce		
10	Bird	1	ce		Distal - white - tropicbird or gull
11	Red Phal	60 ± 5	ce		on 1/20 FLOCK SKITTISH
14	" "	4	ce		
20	JAEG. SP	1	ce		
20	RED PHAL	1	ce		
22	SOOTY SH	3	S		
25	" "	1	S		
27	R PHAL	1	S		
40					1 SPERM WHALES
48	BONAPARTEG.	1	ce		adult winter plum. following eastern
55	SOOTY SH	1	S		
55	STORM PET	1	S		
1111	JAEG SP	1	ce		rom? lt ph
25	SOOTY SH	1	S		
27	H GULL	1	ce		C/L 1120 180 → 270
35					1 SPERM WHALE POINTED E
56	LWISP	8	S		
1217	"	1	S		
40	"	1	S		
45	Phal SP	1	S		
46	LWISP	1	S		
55	Phal SP	1	ce		
57	" "	3	ce		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

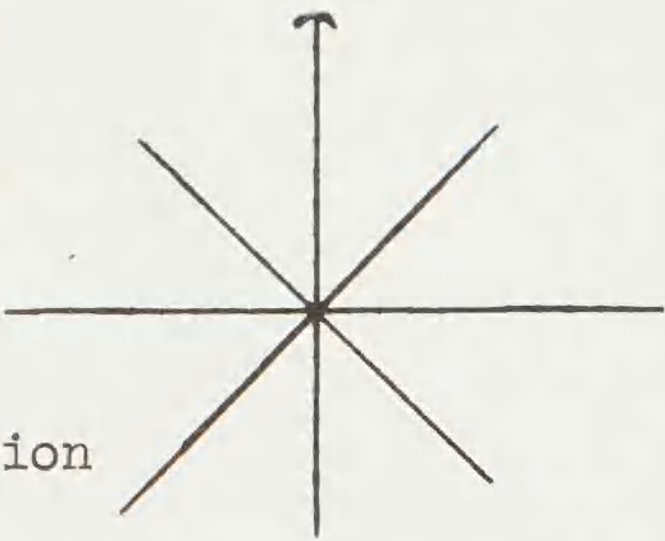
Date 18 Nov 67
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1330				SHIFF IN H2O OBS FROM SHIFF
	1330	RED PHAL.	2	ce	
	44	" "	1	S	
	50	SOOTY SH.	1	ce	
CC	52	RED PHAL	2	ce	2 COLL. CHAN
C	55	LWRSP	1	ce	1 COLL "
	56	RED PHAL	1	ce	
	1405	" "	2	ce	
	00	PALE FOOT SH.	1	ce	
CC	09	RED PHAL	4	ce	20000 CHAN
	15	" "	2	ce	
C	23	" "	10	ce	1 COLL "
	26	STORM PET	1	ce	
C	30	RED PHAL	6	ce	1 COL "
	40	STORM PET	1	ce	
C	50	RED PHAL	4	ce	1 COL "
	53	" "	4	ce	
	57	SHEAR/PET	1	ce	
C	1500	POM. JABER.	1	ce	
	01	RED PHAL	20±	ce	SITTING ON WELD 1 COL. CHAN LT. PH NON AD.
CCCCC	10	" "	25±	ce	ON H2O 7 COLLECTED, CHAN
C	15	" "	1	ce	1 COLL CHAN
C	17	SOOTY SH.	1	ce	" "
	1634	Pom. Jaeger	1	S	Inst. Ad
	36	Sooty Shear	1	ce	
	54	LWRSP	1	ce	
	1706	Sooty Shear	1	ce	
M	07				Delphinus
	08				Porpoise 5 on Bow
	1525	RED PHAL	5	ce	Sun set CLOSE OBS
		SOOTY SH	1	ce	1 COLL CHAN
	30	RED PHAL	50±	S	
	32	SHEAR/PET	1	ce	SOOTY SH/FULM.
CC	35	RED PHAL	3	ce	
C	45	LWRSP	6	ce	2 COLL CHAN
	50	RED PHAL	2	S	1 COL "
	51	SOOTY SH.	1	ce	
C	1605	RED PHAL	1	ce	1 COL "
	07				DELPHINUS CH 200 RIDING SHIFF BOW
	1620				SHIFF OUT

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 19 Nov 67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0656 ————— SUNRISE BEGIN OBS.

0657 BFA (3)
HERRING G. (1)

ce
a ————— ad.

0707 ————— 15⁺ DELPHINUS UNDER BOW

10 STORM PET 1 ce

30 HERRING GULL 2 ce

GLAUCOUS WING 1

ce
S ————— 1 best wind among high

0800 SOOTY SH 1

0840 LA 1

55 SOOTY SH 1

0900 BFA (4)

0930 SOOTY SH 1

1014 Small Pterodroma 1

15 Sooty shear 2

20 Small bird 1

110 SOOTY SH 1

12 Bird sp. 1

1705 BFA (3)

21 —————

SW ————— Probably cook's - Rel 3

S

SW

S

ce

a

in Heavy squall

1 light 2 DK

Sunset

NW 25-30 kt

SEAS - 20 ft.

ON ADP SHEETS
also entered total and flagged for abundance

STORM - 1

HERR - 2

GLAUC - 1

SS - 6

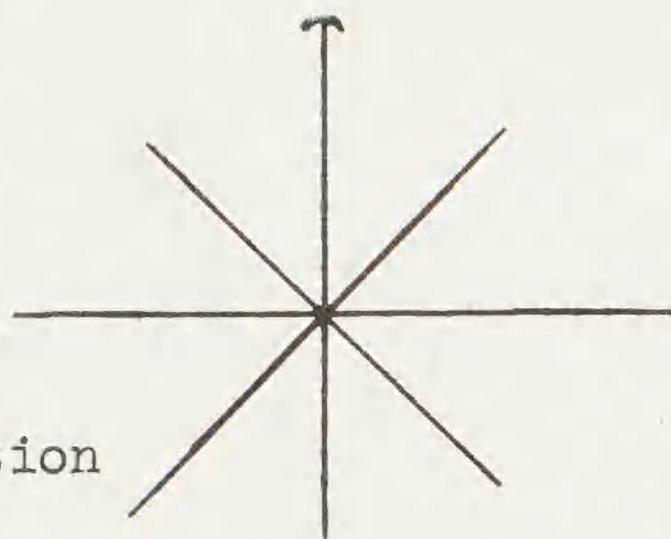
LA - 1

POOK - 1

SMO - 2

✓ 14

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

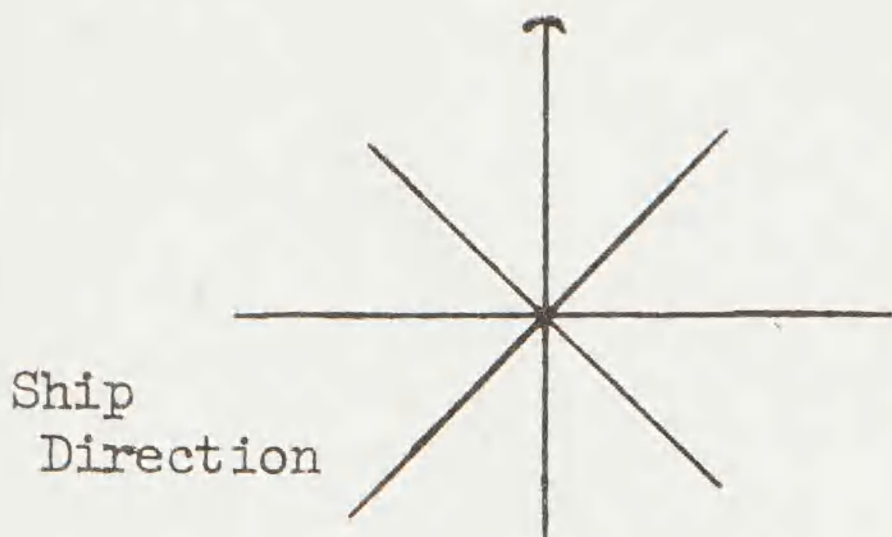
Date 20 Nov 67
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0650					SUNRISE BEGIN OBS.	
0655	BFA	②	ce		both dk.	
0705	STORM PET	1	S			
0752	SOOTY SH	1	S			STORM - 23
0815						SS - 4
0830	GULL SP	1	ce		GRAMPUS RISSO 4+	GULL SP - 1
1023					imm Her. / West.	
43	H. Gull	1	ce		Grampus rissa 40+	H Gull - 1
1105					Following Fun	ROTC - 2
10	ST. Pet	1			Porpoise 15 ± 5	RPHAL 15
15	BFA	③	ce			✓ 46
25					All Dark	
28	LWRSP	1			Pilot whale 4	
47	RBTB	1	ce			
55	BFA	⑤	ce		ad	
1240	LWRSP	1	ce		all dark.	
1340	STORM PET	1	ce			
1341	RBTB	1	E		SITTING ON 420	
1355	RED PHAL	1	ce			
1400	" "	14	ce		KELP IN CREASING IN AREA	
1401	SOOTY SH	1	S			
1413	" "	1	ce			
15	LWRSP	1	ce			
23	"	2	SE			
1507						
	LWRSP	15+	S		Delphinus 30+ - some with white in dorsal	
10	Sooty Shear	1	ce		over Delphinus	
36	Phalarope	6	ce		off Hnd	
38	Red Phal	14	ce			
42	Pale-foot Shear	1	ce			
47	LWRSP	1	ce		Following ship, In light Rain	
52						
55	Sooty Shear	3	ce		Delphinus 5 riding Bow wave, some with white in dorsal	
	LWRSP	1	ce			
1615	Sooty Shear	1	ce			
19	Pom Jaeger	1	ce			
47	Sooty Shear	1	ce		Ad light	
1705	BFA	③	E			
1707			ce		Sunset	

RPH - 20
PFS - 1
STORM - 2
SS - 5
PS - 1
✓ 29



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 21 Nov 67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0643 Janine begin obs. er.

55 BFA ①

0705 Sooty Shear 4

37 LWISP 1

0700 BFA ②

12 Oldsquaw 1

20 BFA ④

24 Sooty Shear 1

37 BFA ⑤

1055 SOOTY SH 1

1125

1425 SM PTERO. 2

1440 LWISP 1

1525 LWISP 1

1526 RED PHAE. 3

1532 " " 1

46 " " 1

1610

1611 LWISP 1

1620 SOOTY SH 1

1700

1710 LA 1

1715 BFA ⑦

1720

DIT

Guiding ship ♀

BALEEN WHALE - 1 - NOT HUMPY POSSIBLY BLUE

BLEW 2X
distant prob cooks.

IN WAKE

HELP IN VICINITY

ON H₂O

SPEWM WHALE 5

1 SPEWM WHALE

1 following

all

SS CLOSE OBS.

SS - 5

STORM - 1

CLDSQ - 1

077000 2

SS - 2

REAR - 2

STORM - 3

RPHAE - 5

LA + 1

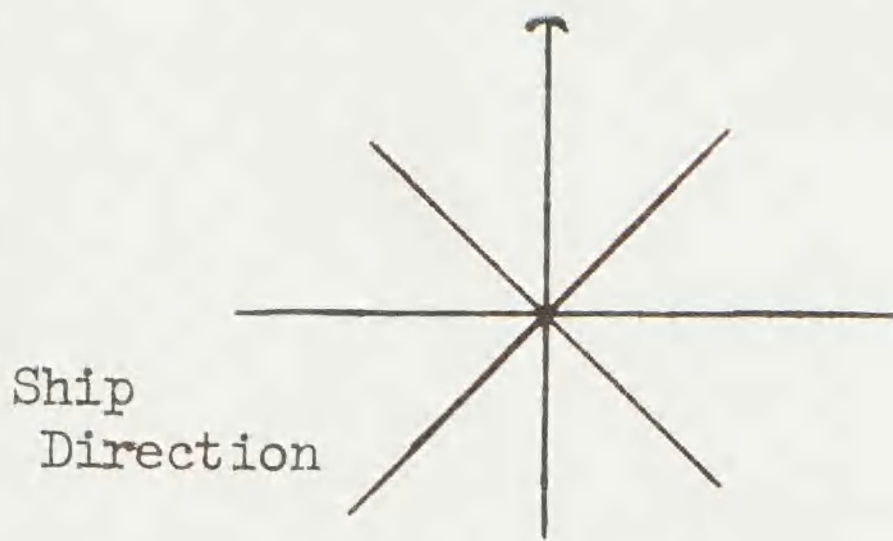
✓ 13

0643-1004 264 ②

27
53

1005-1720 62 ④

793



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

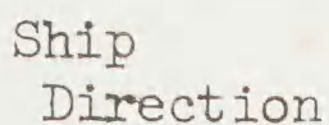
Date 22 Nov. 67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0655					SUNRISE BEGINS
0700	HELENA GULL	1	ce		un
0710	TROPIC BIRD SP	1	ce		DIST. AST. PROB RTTB
0800	BFA	(2)	ce		1 dh 1?
1130	LA	1	ce		Following Ad Bites bill
36	BFA	(3)	ce		ALL DK
1245	GLAUCOUS W. G.	1	ce		1st winter
1400	BFA	(5)	ce		all dark.
1522	N-Z SHOR	1	NE		
1716	BFA	(3)			
17					Sunset

VARIOUS C/L FOR EXTENSION
OF OMINOUS WX



OBSERVERS:

15

Date 23 Nov 67
Pg. # 1

SPECIMEN
or

SI-MNH-958-e
Rev. 5-66

DATE 16 Nov 1967

TOTAL MILES TRAVELED SUNRISE TO SUNSET 105.0

TIME	LAT.	LONG.
0400	3	
0600	35-07N	122-14W
0800	35-02N	122-34W
1000	35-00N	123-02W
1200	35-03N	123-14W
1400	34-58N	123-44W
1600	34-56N	124-07W
1800	34-55N	124-27W
2000	34-47N	124-48W
2400	34-33N	125-30W

[illegible]

SHIP YAG-40

DATE 17 Nov 1967

	TIME	LAT.	LONG.
SUNRISE	0658	34-17N	125-56W
SUNSET	1713	34-09N	123-59W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 98.0

POSITION

TIME	LAT.	LONG.
0400	34-19N	126-12W
0600	34-16N	126-06W
0800	34-19N	125-41W
1000	34-17N	125-19W
1200	34-14N	124-57W
1400	34-08N	124-36W
1600	34-09N	124-09W
1800	34-09N	123-50W
2000	34-07N	123-28W
2400	34-10N	123-03W

COURSE OR SPEED CHANGE

[illegible]

DATE 18 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0658	34-07N	121-25W
SUNSET	1704	33-21N	122-30W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 92.5

POSITION

TIME	LAT.	LONG.
0400	34-12N	121-51W
0600	34-12N	121-26W
0800	33-56N	121-27W
1000	33-37N	121-29W
1200	33-24N	121-38W
1400	33-22N	121-58W
1600	33-20N	122-22W
1800	33-20N	122-41W
2000	33-18N	123-03W
2400	33-19N	123-47W

COURSE OR SPEED CHANGE

[illegible]

E.A.C. CRUISE DATA

SHIP YAG-40DATE 19 NOV 67

	TIME	LAT.	LONG.
SUNRISE	0656	33-18N	124-56W
SUNSET	1721	32-55N	126-21W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 92.5

POSITION

TIME	LAT.	LONG.
0400	33-20N	124-20W
0600	33-20N	124-41W
0800	33-19N	125-07W
1000	33-17N	125-26W
1200	33-17N	125-45W
1400	33-15N	126-09W
1600	33-08N	126-22W
1800	32-54N	126-15W
2000	32-47N	125-54W
2400	32-40N	125-16W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
1545	270	180		33-15N	126-19W
1721	180	105		32-55N	126-21W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 20 NOV 1967

	TIME	LAT.	LONG.
SUNRISE	0650	32-31N	124-11W
SUNSET	1707	32-25N	122-20W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 96.0

POSITION

TIME	LAT.	LONG.
0400	32-33N	124-30W
0600	32-32N	124-18W
0800	32-32N	123-58W
1000	32-30N	123-35W
1200	32-31N	123-11W
1400	32-29N	122-51W
1600	32-26N	122-31W
1800	32-30N	122-25W
2000	32-42N	122-33W
2400	32-19N	122-27W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
0650	105	090		32-31N	124-11W
1707	090	320		32-25N	122-20W
2030	320	160		32-45N	122-36W

E.A.C. CRUISE DATA

SHIP

YAG-40

DATE 21 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0643	31-39N	122-10W
SUNSET	1720	31-40N	123-56W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 92.2

POSITION

TIME	LAT.	LONG.
0400	31-52N	122-16W
0600	31-41N	122-11W
0800	31-40N	122-22W
1000	31-43N	122-39W
1200	31-40N	123-00W
1400	31-40N	123-16W
1600	31-42N	123-39W
1800	31-36N	124-03W
2000	31-28N	124-23W
2400	31-20N	124-57W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
0643	160	270		31-39N	122-10W
1800	270	245		31-36N	124-03W
2400	245	270		31-20N	124-57W
0430	270	175		31-14N	125-40W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 22 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0655	30-58N	125-30W
SUNSET	1717	30-49N	123-41W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 95.0

POSITION

TIME	LAT.	LONG.
0400	31-19N	125-35W
0600	31-04N	125-33W
0800	30-56N	125-20W
1000	30-57N	124-55W
1200	30-54N	124-33W
1400	30-52N	124-15W
1600	30-50N	123-55W
1800	30-49N	123-34W
2000	30-51N	123-14W
2400	30-54N	122-35W

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
0430	270	175		31-19N	125-40W
0655	175	090		30-58N	125-30W
2000	090	087		30-51N	123-14W

SHIP

SHIP YAG-40

DATE 23 Nov 67

	TIME	LAT.	LONG.
SUNRISE	0638	30-56N	121-31W

SUNSET

TOTAL MILES TRAVELED SUNRISE TO SUNSET 27

POSITION

TIME	LAT.	LONG.
0400	30-55N	121-55W
0600	30-56N	121-36W
0800	30-56N	121-16W
1000	31-01N	120-56W
1200		
1400		
1600		
1800		
2000		
2400		

COURSE OR SPEED CHANGE

[illegible]

PRELIMINARY REPORT

EASTERN AREA CRUISE NO. 31

15-24 NOVEMBER 1967

EASTERN GRID SURVEY NO. 17

Prepared by

Richard D. Chandler

Eastern Area Cruise No. 31 - 15-24 November 1967

Cruise Itinerary: 15 November 1000 Depart San Francisco
16 November 0720 Begin Grid Observations
23 November 0930 End Grid Observations
24 November 1130 Arrive Long Beach

Survey Personnel: Richard D. Chandler (Biologist in Charge)
T. James Lewis

Methods

One-man diurnal observations were made from the wings of the bridge except for the afternoon of the 18th when observations were made from the skiff, concurrent with collections. No non-Grid nor nocturnal observations were taken on this cruise. No BT soundings were taken. Other methods and procedures followed those established on previous cruises.

Cruise Track (See Figure 1)

Very dense fog on the non-Grid leg from San Francisco to the Grid prohibited observations on the 15th. Due to the work required prior to offloading equipment in Long Beach, no observations were made outside the Grid on the 23rd and 24th. A number of departures were made from the nominal Grid cruise track. The departures made it possible to cover all sections of the Grid in the allotted time period which was necessarily foreshortened due to ship scheduling.

Excellent cooperation was received from Captain Kaiser, the deck force, weather personnel, quartermasters, and all concerned with the operation.

Conditions

A complex low-pressure system developed over the Grid area, moved eastward over the coast, retrograded back to the Grid area, and moved to the south, all during the week of the survey. The weather was extremely variable with markedly shifting winds that at times came from the south and southeast instead of the much more regular direction of north and northwest. A steady rain on the 17th was followed with briefer showers almost daily during the rest of the time in the Grid. Water spouts were seen on the 22nd. Heavy rainfall over adjacent land may have contributed to the fact that no stray landbirds were seen. Slicks and floating kelp patches were noted in the eastern third, particularly in Section W.

Collections

Nineteen Red Phalaropes, two Leach's Storm Petrels, one Sooty

Shearwater, and one Pomarine Jaeger were collected in the Grid on the 18th. A serum sample was taken from the Jaeger. No other collections were obtained.

Eastern Grid Survey No. 17

Over the 686 miles and 74.3 hours of diurnal observations 793 birds of 20 species were recorded. Twenty-three birds of three species were collected. Twenty-four marine mammal sightings were obtained.

Highlights

1. Absence of errant landbirds.
2. High numbers of Sooty Shearwaters moving south.
3. High numbers of Red Phalaropes in the eastern sections of the Grid.
4. Unexpected decrease in Fulmar sightings.

The overall pattern of bird distribution within the Grid is again similar to many previous surveys with the high density in the northeast areas and low density in the opposite corner:

1.144	2.320	1.596
.158	.582	3.420
.057	.123	.189

Linear density in each section

3	11	9
6	5	7
2	7	4

Species per section

The three major species - Sooty Shearwater, Leach's Storm Petrel, and Red Phalarope - accounted for over 84 percent of the total observations. Loons, ducks, jaegers, and Herring Gulls each contributed about three percent to the total. The remaining five percent included 11 species present in low numbers.

Species Accounts

Loon sp.

Obs. = 17

Loons (probably Arctics) were seen singly or in groups of 2 to 4 flying southeast across the northeastern corner of the Grid. One bird followed the ship briefly.

Laysan Albatross
Diomedea immutabilis

Obs. = 3

Single birds were seen on the 19th, 21st, and 22nd, in the southwest part of the Grid. These are the first sightings since early May. One bird followed the ship for over half an hour.

Laysan Albatross is here statistically treated like the other birds whereas Black-footed Albatross is again eliminated from the regular tables.

Black-footed Albatross	Total # Obs.	= 31
<u>Diomedea nigripes</u>	Avg. #/day	= 3.8
	Median of 8 days	= 4
	High max. day count	= 7
	Low max. day count	= 2

Of the 28 birds with rump color noted only one was sharp white; the remainder were all dark. Numbers have increased slightly over the low point reached on the last survey. There appears to be a tendency for higher numbers in the southwest.

Fulmar	# Obs. = 1
<u>Fulmarus glacialis</u>	

The virtual absence of Fulmars in the Grid was very unexpected.

Sooty Shearwater	# Obs. = 204
<u>Puffinus griseus</u>	

After the abrupt southeast migration peak in mid-September a period of about a month passed wherein Sooty numbers over the coastal area were low. Through the November surveys, however, another influx of southward-moving birds has been noted. This secondary migration is on a broader front and less concentrated than the first. Unlike the well-defined southeast direction in September, the present movement is due south. One collected bird was an immature male and suggests the possibility that the present movement is of immature and non-prebreeding birds, whereas the September peak may have been prebreeding adults.

Pale-footed Shearwater	# Obs. = 2
<u>Puffinus carneipes</u>	

The second and third records for the Grid area. Both were seen in Section W.

New Zealand Shearwater	# Obs. = 1
<u>Puffinus bulleri</u>	

The single bird was seen heading northeast in Section Y.

Small <u>Pterodroma</u>	# Obs. = 4
-------------------------	------------

The three sightings scattered over the Grid were possibly referable to P. cooki.

Leach's Storm Petrel
Oceanodroma leucorhoa

Obs. = 174

.527	.710	.094
.011	.292	.274
.000	.023	.038

Linear density per section

A southward moving population was present during the survey of the northern third of the Grid, but had evidently passed through the Grid area by the end of the survey. Ten birds were found associated with a pair of Killer Whales on 17 November. The birds were evidently feeding on the remains of some unidentified prey that the whales had taken. Only one dark-rumped bird was noted during the survey. With greater than 95 percent certainty all Storm Petrels sighted were Leach's.

Red-billed Tropicbird
Phaethon aethereus
Tropicbird sp.

Obs. = 2

Obs. = 1

Two Red-bills (1 adult, 1?) were seen in Section V on the 20th. A poorly seen bird, thought to have been a Red-tail, was seen in the southwest division on the 22nd.

Pintail
Anas acuta

Obs. = 32

The single sighting was of a flock of 32 birds flying south in Section S on the 16th.

Oldsquaw
Clangula hyemalis

Obs. = 1

A single female circled the ship on 21 November in Section Z. This constitutes the first sight record for the Grid area.

Black Turnstone
Arenaria melanocephala

Obs. = 1

A single calling bird investigated the ship briefly on the 16th in the northeast subsection (T).

Red Phalarope
Phalarope sp.

# Obs.	=	252
# Obs.	=	38
Total		290

.000	.056	.531
.000	.190	2.895
.000	.039	.000

Linear density in each section

The Phalarope concentrations during the previous survey (31 October

to 8 November) were found largely in Section T, the typical high-density area throughout the summer and fall. The usual slick areas were not noted, however, in conjunction with the Phalaropes during the previous survey, although slicks were found further south. During this survey the slick areas and the Phalarope concentrations were again found simultaneously, but about 100 miles south of the old "T" area locations. The importance of the simultaneous occurrence of Phalaropes and the slick areas should be stressed; no other species shows such a high positive correlation with an environmental parameter. More needs to be known about the slicks themselves. Phalaropes, one of the major elements of the Grid avifauna, are as yet the least understood. The sex ratio of the 19 birds collected on the 18th heavily favored females 14:4 (1 not sexed). Winter and spring 1967 collections indicate that females apparently winter in the Grid area while most males move further to the south. High priority should be given to obtaining a large series of this interesting species.

Jaegers
Stercorarius sp.

Obs. = 18

0	.048	.188
0	0	.190
0	0	0

Linear density

Pomarinies were positively identified and I feel that most, if not all, Jaegers were indeed this species. Two adults (1 light and 1 intermediate phase) were seen but most of the sightings appeared to be non-adults, generally light phase. The distribution within the Grid is clearly a function of proximity to the coast.

Skua
Catharacta skua

Obs. - 1

One skua was seen heading south in Section S on the 17th.

Glaucous-winged Gull
Larus glaucescens

Obs. = 2

The two sightings in Sections U and Y were of first winter-plumaged birds.

Herring Gull
Larus argentatus

Obs. = 18

No birds were recorded in the southern third of the Grid in the early November survey. During the present survey two immatures were logged in Sections X and Z representing the southward movement of the species, especially of the immatures (see Figure 2). The three adults recorded were all in the northern half of the Grid.

Western Gull
Larus occidentalis

Obs. = 3

One immature and two adults were found in Section T.

Bonaparte's Gull
Larus philadelphia

Obs. = 4

0	0	2+3
0	0	2+1
0	0	3+0

Occurrence of Bonaparte's Gull on Grid area, fall 1957

First figure	EGS 16 early November
Second figure	EGS 17 late November

Southbound birds skirted the eastern and northeastern edges of the Grid during both November surveys.

Alcid sp.

Obs. = 1

One unidentified large alcid was observed in Section S.

TABLE 1 PART B:

	R ST NORTH		U V W CENTER		X Y Z SOUTH		R U X WEST		S V Y CENTER		T W Z EAST		#OBS	TOTAL 070 TOTAL # COL. SPEC.		# SERIAL COL.	OCCURRENCE SECTION DATE(S)	
LOON SP.	.080	17							.045	15	.012	2	17	2.1				
LAYSAN ALBATROSS			.004	1	.009	2	.006	1	.006	2			3	0.4				
FULMAR	.005	1							.003	1			1	0.1			S	16
SOOTY SHEARWATER	.793	168	.109	28	.037	8	.218	39	.396	132	.191	33	204	25.7	1			
PALE-FOOTED SHEARWATER			.008	2							.012	2	2	0.3			W	18 & 20
NEW ZEALAND SHEARWATER					.005	1			.003	1			1	0.1			Y	22
SMALL PTERODROMA	.005	1	.004	1	.009	2	.006	1	.009	3			4	0.5				
SHEARWATER/PETREL SP.	.014	3	.008	2					.006	2	.017	3	5	0.6				
STORM PETREL	.571	121	.167	48	.023	5	.168	30	.345	115	.168	52	174	21.9	2			
RED-BILLED TROPIC BIRD			.008	2					.006	2			2	0.3			V	20
TROPIC BIRD SP.					.005	1	.006	1					1	0.1			X	22
PINTAIL	.151	32							.096	32			32	4.0			S	16
OLDSQUAW					.005	1					.006	1	1	0.1			Z	21
BLACK TURNSTONE	.005	1									.006	1	1	0.1				
PHALAROPES	.113	24	.019	261	.023	5			.081	27	1.520	263	290	36.6	19			
JAEGER	.057	12	.023	6						6	.070	12	18	2.3	1			
SKUA	.005	1							.003	1			1	0.1			S	17
GLAUCOUS-WINGED GULL			.004	1	.005	1	.006	1	.003	1			2	0.3				
HERRING GULL	.057	12	.016	4	.009	2	.022	4	.021	7	.041	7	18	2.3				
WESTERN GULL	.014	3									.017	3	3	0.4			T	16 & 18
BONAPARTES GULL	.014	3	.004	1							.023	4	4	0.5				
GULL SP.	.005	1	.009	1					.003	1	.006	1	2	0.3				
LARGE ALCID SP.	.005	1							.003	1			1	0.1			S	16
BIRD SP.	.014	3	.012	3			.011	2	.009	3	.006	1	6	0.8				
TOTAL	1.906	404	1.410	361	.128	28	.441	79	1.054	352	2.092	362	793		23	1		
# MILES		212		256		218		179		334		173	686					
# HOURS		22.4		28.6		23.3		19.6		35.4		193	743					

EASTERN PACIFIC OCEAN

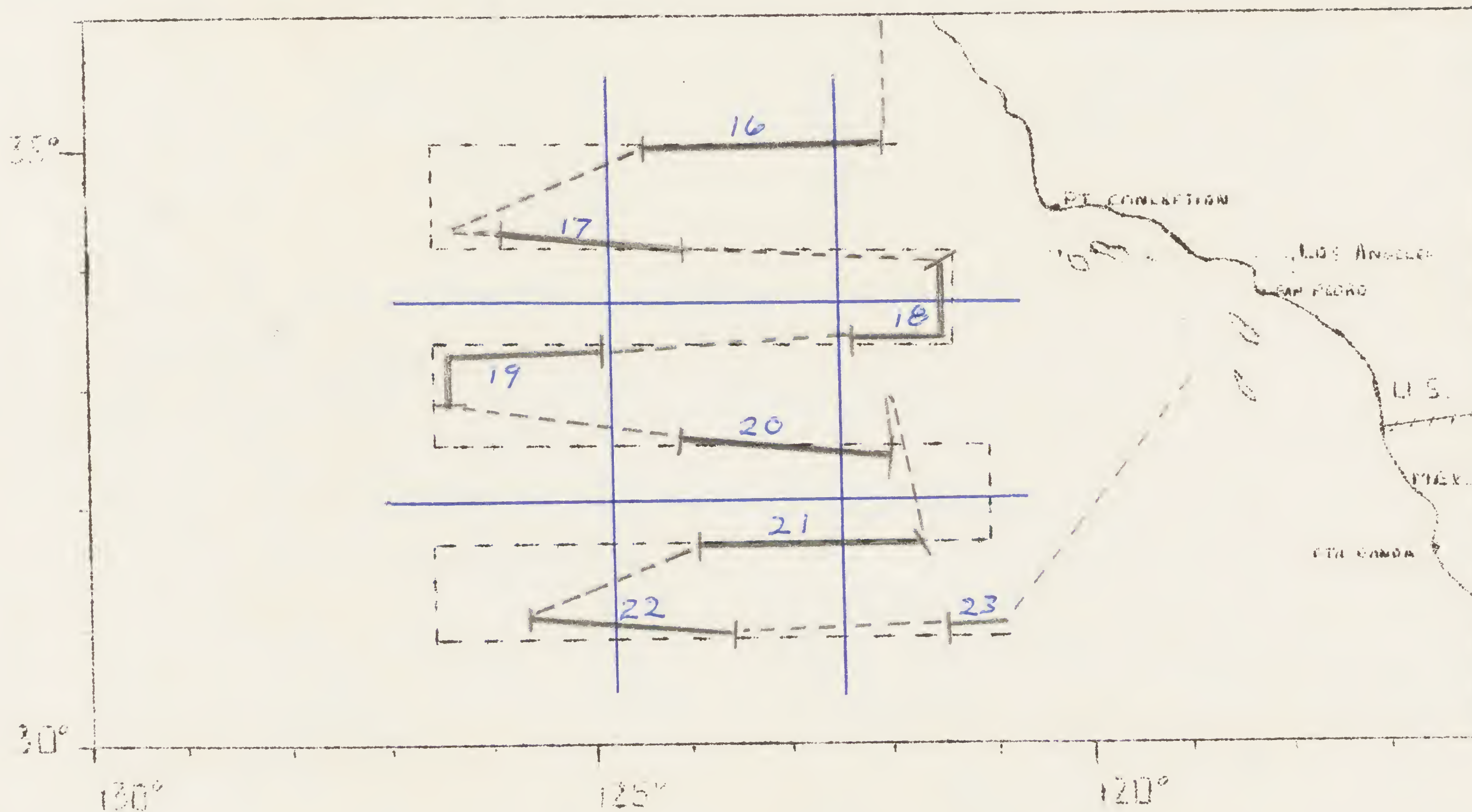


FIG #1 CRUISE TRACK,
EGS #17 (EAC #31),
16-23 Nov. 1967

EASTERN PACIFIC OCEAN

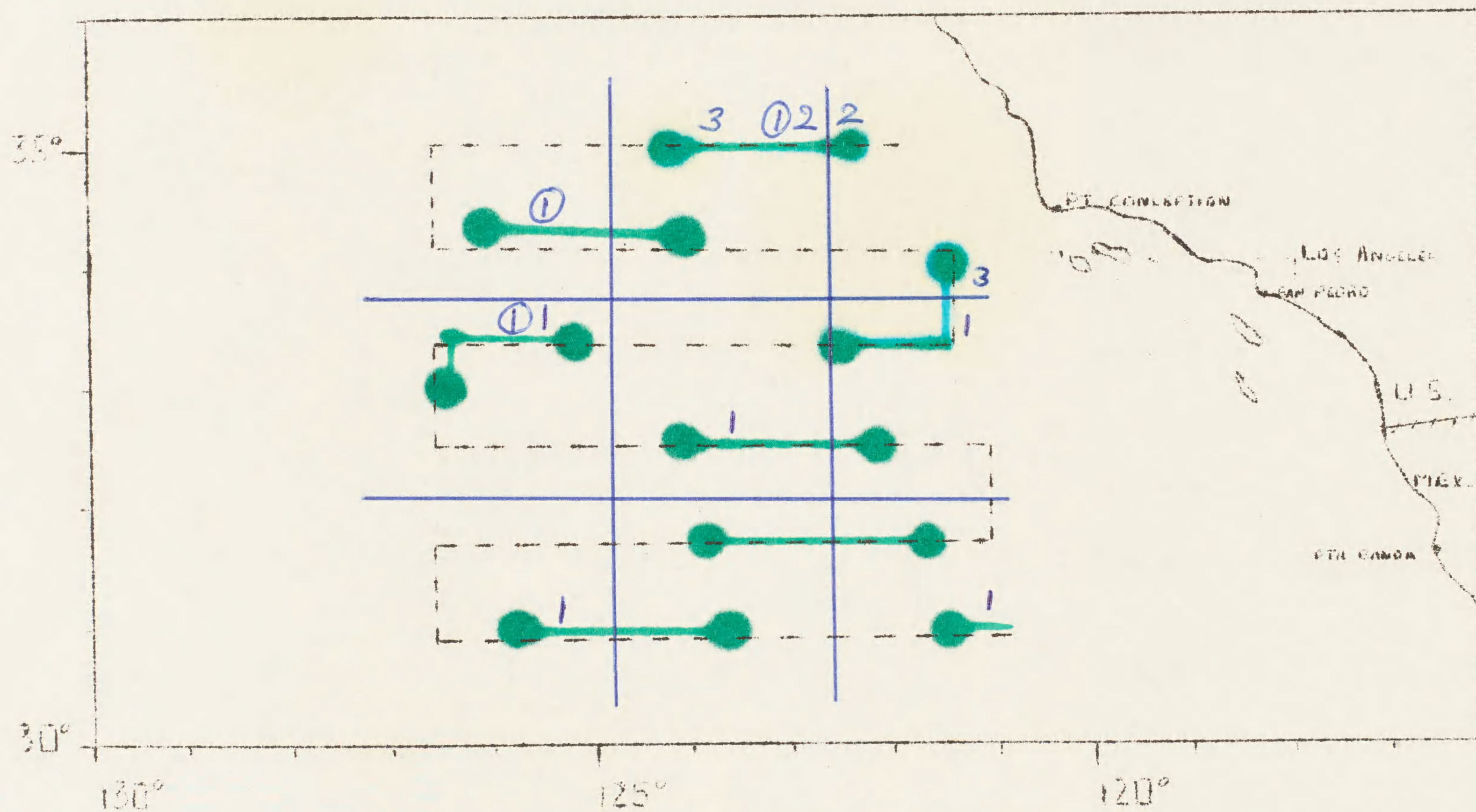


FIG. #2 EGS #17 16-23 NOVEMBER 1967
HERRING GULL-AGE DISTRIBUTION
① ADULT
1 NON-ADULT